J Clin Epidemiol Vol. 52, No. 12, pp. 1299–1309, 1999
Copyright © 1999 Elsevier Science Inc. All rights reserved.

0895-4356/99 $–see front matter

# VOLUME 52

## LIST OF CONTENTS

**Number 1**

*Commentary*

**C. David Naylor** 1 Ecological analysis of intended treatment effects: *Caveat emptor*

*Original Articles*

**Shi Wu Wen** and **Michael S. Kramer** 7 Uses of ecologic studies in the assessment of intended treatment effects

**Bevan Yueh** and **Alvan R. Feinstein** 13 Abstruse comparisons: The problems of numerical contrasts of two groups

**Walter N. Kernan, Catherine M. Viscoli, Robert W. Makuch, Lawrence M. Brass,** and **Ralph I. Horwitz** 19 Stratified randomization for clinical trials

**Linda P. Fried, Karen Bandeen-Roche, Judith D. Kasper,** and **Jack M. Guralnik** 27 Association of comorbidity with disability in older women: The women's health and aging study

**Leslie L. Roos** and **J. Patrick Nicol** 39 A research registry: Uses, development, and accuracy

**Steven A. Grover, Carey Levinton,** and **Steeve Paquet** 49 Identifying adults at low risk for significant hyperlipidemia: A validated clinical index

**Kwan-Moon Leung, Aliya G. Hasan, Karen S. Rees, Robert G. Parker,** and **Antonio P. Legorreta** 57 Patients with newly diagnosed carcinoma of the breast: Validation of a claim-based identification algorithm

**Daniel O. Clark, Kurt Kroenke, Christopher M. Callahan,** and **Clement J. McDonald** 65 Validity and utility of patient-reported health measures on hospital admission

**Fiona C. Lampe, Mary Walker, Lucy T. Lennon, Peter H. Whincup,** and **Shah Ebrahim** 73 Validity of a self-reported history of doctor-diagnosed angina

**Carlo Senore, Renaldo N. Battista, Antonio Ponti, Nereo Segnan, Stanley H. Shapiro, Stefano Rosso,** and **Daniela Aimar** 83 Comparing participants and nonparticipants in a smoking cessation trial: Selection factors associated with general practitioner recruitment activity

*Letter to the Editors*

**Ulrich Keil, Jutta Stieber, Birgit Filipiak, Hannelore Löwel,** and **H.-Erich Wichman** 91 On misclassification of smoking

**Wolf-Dieter Heller, Gerhard Scherer, Franz Adlkofer,** and **Elke Sennewald** 92 Response

**Number 2**

*Original Articles*

**Catherine B. Johannes, Rebecca K. Stellato, Henry A. Feldman, Christopher Longcope,** and **John B. McKinlay** 95 Relation of dehydroepiandrosterone and dehydroepiandrosterone sulfate with cardiovascular disease risk factors in women: Longitudinal results from the Massachusetts Women's Health Study

**Robert G. Marx, Claire Bombardier, Sheila Hogg-Johnson,** and **James G. Wright** 105 Clinimetric and psychometric strategies for development of a health measurement scale

**Paula A. Rochon, Malcolm A. Binns, Jason A. Litner, Geoffrey M. Litner, Michelle S. Fischbach, David Eisenberg, Ted J. Kaptchuk, William B. Stason,** and **Thomas C. Chalmers** 113 Are randomized control trial outcomes influenced by the inclusion of a placebo group?: A systematic review of nonsteroidal antiinflammatory drug trials for arthritis treatment

**David J. Margolis, Jesse A. Berlin,** and **Brian L. Strom** 123 A comparison of sensitivity analyses of the effect of wound duration on wound healing

**Paul A. Godley** and **Michael J. Schell** 129 Adjusted odds ratios under nondifferential misclassification: Application to prostate cancer

**Stephanie M. Kieszak, W. Dana Flanders, Andrzej S. Kosinski, Clanton C. Shipp,** and **Herbert Karp** 137 A comparison of the Charlson Comorbidity Index derived from medical record data and administrative billing data

**Nicholas L. Smith, Bruce M. Psaty, Susan R. Heckbert, Russell P. Tracy,** and **Elaine S. Cornell** 143 The reliability of medication inventory methods compared to serum levels of cardiovascular drugs in the elderly

**Peter B. Bach, Elizabeth A. Calhoun,** and **Charles L. Bennett** 147 Identifying providers of care to individuals with Human Immunodeficiency Virus for a mail survey using a prescription tracking database

**Michel P. Kossovsky, Thomas V. Perneger, François P. Sarasin, Filippo Bolla, François Borst,** and **Jean-Michel Gaspoz** 151 Comparison between planned and unplanned readmissions to a department of internal medicine

**Markku Mähönen, Veikko Salomaa, Jorma Torppa, Heikki Miettinen, Kalevi Pyörälä, Pirjo Immonen-Räihä, Matti Niemelä, Matti Ketonen, Matti Arstila, Esko Kaarsalo, Seppo Lehto, Harri Mustaniemi, Pertti Palomäki, Pekka Puska, Tapio Vuorenmaa,** and **Jaakko Tuomilehto** 157 The validity of the routine mortality statistics on coronary heart disease in Finland: Comparison with the FINMONICA MI register data for the years 1983–1992

***Pharmacoepidemiological Reports***

**Jørgen H. Olsen, Christoffer Johansen, Henrik Toft Sørensen, Joseph K. McLaughlin, Lene Mellemkjær, Flemming Hald Steffensen,** and **Joseph F. Fraumeni, Jr.** 167 Lipid-lowering medication and risk of cancer

**Number 3**

***Original Articles***

**Julián Librero, Salvador Peiró,** and **Rosa Ordiñana** 171 Chronic Comorbidity and Outcomes of Hospital Care: Length of Stay, Mortality, and Readmission at 30 and 365 Days

**B. Santos-Eggiman, F. Zobel,** and **A. Clerc Bérod** 181 Functional Status of Elderly Home Care Users: Do Subjects, Informal and Professional Caregivers Agree?

**Gordon H. Guyatt, Derek R. King, David H. Feeny, David Stubbing,** and **Roger S. Goldstein** 187 Generic and Specific Measurement of Health-Related Quality of Life in a Clinical Trial of Respiratory Rehabilitation

**Robert G. Marx, Claire Bombardier, Sheilah Hogg-Johnson,** and **James G. Wright** 193 How Should Importance and Severity Ratings Be Combined for Item Reduction in the Development of Health Status Instruments?

**Katherine M. Newton, Edward H. Wagner, Scott D. Ramsey, David McCulloch, Rhian Evans, Nirmala Sandhu,** and **Connie Davis** 199 The Use of Automated Data to Identify Complications and Comorbidities of Diabetes: A Validation Study

| | | |
|---|---|---|
| **Harold I. Feldman, Warren B. Bilker, Monica H. Hackett, Christopher W. Simmons, John H. Holmes, Mark V. Pauly,** and **José J. Escarce** | 209 | Association of Dialyzer Reuse with Hospitalization and Survival Rates Among U.S. Hemodialysis Patients: Do Comorbidities Matter? |
| **Barbara E. Ainsworth, Mark T. Richardson, David R. Jacobs Jr., Arthur S. Leon,** and **Barbara Sternfeld** | 219 | Accuracy of Recall of Occupational Physical Activity by Questionnaire |
| **Patrick D. Bridge** and **Shlomo S. Sawilowsky** | 229 | Increasing Physicians' Awareness of the Impact of Statistics on Research Outcomes: Comparative Power of the t-test and Wilcoxon Rank-Sum Test in Small Samples Applied Research |
| **Daniel Bautista, Estanislao Arana, Luis Martí-Bonmatí**, and **Roberto Paredes** | 237 | Validation of Logistic Regression Models in Small Samples: Application to Calvarial Lesions Diagnosis |
| **Jane A. Barrett, John A. Baron, Margaret R. Karagas,** and **Michael L. Beach** | 243 | Fracture Risk in the U.S. Medicare Population |
| **C. Quantin, E. Sauleau, P. Bolard, C. Mousson, M. Kerkri, P. Brunet Lecomte, T. Moreau,** and **L. Dusserre** | 251 | Modeling of High-cost Patient Distribution within Renal Failure Diagnosis Related Group |
| **Gregory P. Samsa, Richard A. Reutter, Giovanni Parmigiani, Marek Ancukiewicz, Paul Abrahamse, Joseph Lipscomb,** and **David B. Matchar** | 259 | Performing Cost-Effectiveness Analysis by Integrating Randomized Trial Data with a Comprehensive Decision Model: Application to Treatment of Acute Ischemic Stroke |

**Number 4**

***Original Articles***

| | | |
|---|---|---|
| **Jiska Cohen-Mansfield, Marcia S. Marx, Steven Lipson,** and **Perla Werner** | 273 | Predictors of Mortality in Nursing Home Residents |
| **John P. A. Ioannidis, Despina G. Contopoulos-Ioannidis,** and **Joseph Lau** | 281 | Recursive Cumulative Meta-analysis: A Diagnostic for the Evolution of Total Randomized Evidence from Group and Individual Patient Data |
| **Paul F. M. Krabbe, Marlies E. A. Stouthard, Marie-Louise Essink-Bot,** and **Gouke J. Bonsel** | 293 | The Effect of Adding a Cognitive Dimension to the EuroQol Multiattribute Health-Status Classification System |
| **Bjarne K. Jacobsen, Synnøve F. Knutsen,** and **Gary E. Fraser** | 303 | Age at Natural Menopause and Total Mortality and Mortality from Ischemic Heart Disease: The Adventist Health Study |
| **Mary Beth Landrum, Barbara J. McNeil, Laurie Silva,** and **Sharon-Lise T. Normand** | 309 | Understanding Variability in Physician Ratings of the Appropriateness of Coronary Angiography After Acute Myocardial Infarction |
| **Yuko Y. Palesch, Ivo Valter, Patrick H. Carpentier,** and **Hildegard R. Maricq** | 321 | Association between Cigarette and Alcohol Consumption and Raynaud's Phenomenon |
| **Desmond E. M. Williams, Nicholas J. Wareham, Brian D. Cox, Christopher D. Byrne, C. Nicholas Hales,** and **Nicholas E. Day** | 329 | Frequent Salad Vegetable Consumption is Associated with A Reduction in the Risk of Diabetes Mellitus |
| **Amanda Nicholson, Ian R. White, Peter Macfarlane, Eric Brunner,** and **Michael Marmot** | 337 | Rose Questionnaire Angina in Younger Men and Women: Gender Differences in the Relationship to Cardiovascular Risk Factors and Other Reported Symptoms |

***Guggenmoos-Holzmann Memorial Symposium***

| | | |
|---|---|---|
| **Ulrich Mansmann, Kim Bloomfield,** and **Sabine Damm** | 349 | Extending Horizons of Clinical Research—A Personal Quest |
| **Walter O. Spitzer** | 351 | Pharmacoepidemiology: Barriers and Bridges Tribute to Irene Guggenmoos- Holzmann |

| | | |
|---|---|---|
| **Sharon Wood-Dauphinee** | 355 | Assessing Quality of Life in Clinical Research: From Where Have We Come and Where Are We Going? |
| **Alvan R. Feinstein** | 365 | What Can Clinicians Contribute to Mutual Challenges in Medical Statistics? |
| **Paul Hermanek** | 371 | Prognostic Factor Research in Oncology |
| **Karl-Heinz Jöckel** and **Andreas Stang** | 375 | Perspectives of Clinical Epidemiology in Germany |
| | 379 | Erratum |

**Number 5**

***Original Articles***

| | | |
|---|---|---|
| **Karon F. Cook, Linda Rabeneck, Catherine J. M. Campbell,** and **Nelda P. Wray** | 381 | Evaluation of a Multidimensional Measure of Dyspepsia-Related Health for Use in a Randomized Clinical Trial |
| **Yutaka Yasui** and **John Whitton** | 393 | Problems in Using Age-Stratum-Specific Reference Rates for Indirect Standardization |
| **Steven D. Edland, Amy B. Graves, Wayne C. McCormick,** and **Eric B. Larson** | 399 | Estimation and Sample Design in Prevalence Surveys of Dementia |
| **M. Sarah Rose, Mary Lou Koshman, Sheila Spreng,** and **Robert Sheldon** | 405 | Statistical Issues Encountered in the Comparison of Health-Related Quality of Life in Diseased Patients to Published General Population Norms: Problems and Solutions |
| **Graziella Bruno, Paolo Cavallo-Perin, Giuseppe Bargero, Milena Borra, Nicola D'Errico, Giuseppe Macchia Massimo Veglio,** and **Gianfranco Pagano** | 413 | Cardiovascular Risk Profile of Type 2 Diabetic Patients Cared for by General Practitioners or at a Diabetes Clinic: A Population-Based Study |
| **Jaime Guzmán, Paul Peloso,** and **Claire Bombardier** | 419 | Capturing Health Care Utilization after Occupational Low-Back Pain: Development of an Interviewer-Administered Questionnaire |
| **Satu Männistö, Pirjo Pietinen, Mikko Virtanen, Vesa Kataja,** and **Matti Uusitupa** | 429 | Diet and the Risk of Breast Cancer in a Case-Control Study: Does the Threat of Disease Have an Influence on Recall Bias? |
| **Allan C. Gelber, Fredrick M. Wigley, Rebecca Y. Stallings, Lee R. Bone, Anne V. Barker, Ingrid Baylor, Clyde W. Harris, Martha N. Hill, Scott L. Zeger,** and **David M. Levine** | 441 | Symptoms of Raynaud's Phenomenon in an Inner-City African-American Community: Prevalence and Self-Reported Cardiovascular Comorbidity |
| **Fred Ederer, Mindy S. Geisser, Steven J. Mongin, Timothy R. Church,** and **Jack S. Mandel** | 447 | Colorectal Cancer Deaths as Determined by Expert Committee and from Death Certificate: A Comparison. The Minnesota Study |
| **Dawn P. Misra** and **Cande V. Ananth** | 453 | Risk Factor Profiles of Placental Abruption in First and Second Pregnancies: Heterogeneous Etiologies |
| **Xianglin Du, Jean L. Freeman,** and **James S. Goodwin** | 463 | Information on Radiation Treatment in Patients with Breast Cancer: The Advantages of the Linked Medicare and SEER Data |

***Pharmacoepidemiology Report***

| | | |
|---|---|---|
| **Maryse Lapeyre-Mestre, Evelyne Chastan, André Louis,** and **Jean-Louis Montastruc** | 471 | Drug Consumption in Workers in France: A Comparative Study at a 10-Year Interval (1996 versus 1986) |
| ***Abstracts*** | 479 | Abstracts of the Second Annual SCHR Meeting |

**Number 6**


*Commentary*

**Ulrich Abel** and **Armin Koch** 487 The role of randomization in clinical studies: Myths and beliefs

*Original Articles*

**Chiara Cattaruzzi, Maria Grazia Troncon, Luisa Agostinis,** and **Luis A. García Rodríguez** 499 Positive predictive value of ICD–9th codes for upper gastrointestinal bleeding and perforation in the Sistema Informativo Sanitario Regionale Database

**Ron Schellings, Alphons G. H. Kessels, Gerben ter Riet,** and **Ferd Sturmans** 503 The Zelen Design may be the best choice for a heroin-provision experiment

**Kari Furu** and **Bjørn Straume** 509 Use of antacids in a general population: The impact of health-related variables, lifestyle and sociodemographic characteristics

**Scott B. Cantor** and **Theodore G. Ganiats** 517 Incremental cost-effectiveness analysis: The optimal strategy depends on the strategy set

**Mogens Groenvold, Peter M. Fayers, Mirjam A. G. Sprangers, Jakob B. Bjorner, Marianne C. Klee, Neil K. Aaronson, Per Bech,** and **Henning T. Mouridsen** 523 Anxiety and depression in breast cancer patients at low risk of recurrence compared with the general population: A valid comparison?

**J. Carel Bakx, Henk J. M. van den Hoogen, Wil J. H. M. van den Bosch, C. P. van Schayck, Jan W. van Ree, Theo Thien,** and **Chris van Weel** 531 Development of blood pressure and the incidence of hypertension in men and women over an 18-year period: Results of the Nijmegen Cohort Study

**Yung-Ching Liu, Wen-Kuei Huang, Tsai-Shu Huang,** and **Calvin M. Kunin** 539 Detection of antimicrobial activity in urine for epidemiologic studies of antibiotic use

**Roger J. Marshall** 547 An empirical investigation of exposure measurement bias and its components in case-control studies

**Daniel C. Malone, Sarah J. Billups, Robert J. Valuck,** and **Barry L. Carter** for the **IMROVE Investigators** 551 Development of a chronic disease indicator score using a Veterans Affairs Medical Center medication database

**F. Javier Nieto, Ana Diez-Roux, Moyses Szklo, George W. Comstock,** and **A. Richey Sharrett** 559 Short- and long-term prediction of clinical and subclinical atherosclerosis by traditional risk factors

**Chris Robertson, Sara Gandini,** and **Peter Boyle** 569 Age-period-cohort models: A comparative study of available methodologies

**Michel Wensing, Jan Mainz, Odd Kramme, Hans Peter Jung,** and **Mats Ribacke** 585 Effect of mailed reminders on the response rate in surveys among patients in general practice

*Pharmacoepidemiology Report*

**Eric Bruckert, Christine Simonetta, Philippe Giral,** and the **CREOLE Study Team** 589 Compliance with fluvastatin treatment characterization of the noncompliant population within a population of 3845 patients with hyperlipidemia


**Number 7**


*Original Articles*

**Merete Osler, Klaus Rostgaard, Thorkild I. A. Sørensen,** and **Mette Madsen** 595 The effect of recurrent events on register-based estimates of level and trends in incidence of acute myocardial infarction

**Jacqueline J. M. de Vreede-Swagemakers, Anton P. M. Gorgels, Matty P. Weijenberg, Willy I. Dubois-Arbouw, Birgit Golombeck, Jan W. van Ree, Andre Knottnerus,** and **Hein J. J. Wellens** 601 Risk indicators for out-of-hospital cardiac arrest in patients with coronary artery disease

| | | |
|---|---|---|
| **Åsmund Reikvam** and **Ivar Aursnes** for the **European Secondary Prevention Study Group** | 609 | Hospital mortality from acute myocardial infarction has been modestly reduced after introduction of thrombolytics and aspirin: Results from a new analytical approach |
| **Gaietà Permanyer-Miralda, Jordi Alonso, Carlos Brotons, Purificació Cascant, Aida Ribera, Irene Moral, Bernat Romero, Enric Domingo, Josep Maria Antó,** and **Jordi Soler-Soler** | 615 | Perceived health over 3 years after percutaneous coronary balloon angioplasty |
| **Susan van Rooyen, Nick Black,** and **Fiona Godlee** | 625 | Development of the review quality instrument (RQI) for assessing peer reviews of manuscripts |
| **Klaus Linde, Michael Scholz, Gilbert Ramirez, Nicola Clausius, Dieter Melchart,** and **Wayne B. Jonas** | 631 | Impact of study quality on outcome in placebo-controlled trials of homeopathy |
| **Wilson D. Moreira, Flávio D. Fuchs, Jorge P. Ribeiro,** and **Lawrence J. Appel** | 637 | The effects of two aerobic training intensities on ambulatory blood pressure in hypertensive patients: Results of a randomized trial |
| **Richard A. Washburn, Edward McAuley, Jeffrey Katula, Shannon L. Mihalko,** and **Richard A. Boileau** | 643 | The physical activity scale for the elderly (PASE): Evidence for validity |
| **Martin R. Stockler, David Osoba, Paul Corey, Pamela J. Goodwin,** and **Ian F. Tannock** | 653 | Convergent discriminitive, and predictive validity of the prostate cancer specific quality of life instrument (PROSQOLI) assessment and comparison with analogous scales from the EORTC QLQ-C30 and a trial-specific module |
| **Patricia P. Katz, Mark D. Eisner, Jonathan Henke, Stephen Shiboski, Edward H. Yelin,** and **Paul D. Blanc** | 667 | The marks asthma quality of life questionnaire: Further validation and examination of responsiveness to change |
| **Martín Caicoya, Teresa Rodriguez, Carmen Corrales, R. Cuello,** and **Cristina Lasheras** | 677 | Alcohol and stroke: A community case-control study in Asturias, Spain |
| **Marika K. Iwane, Janet Wittes, Dorothea E. Collins,** and **Hanna B. Rubins** | 685 | Simultaneous screening for three correlated lipids in the VA HDL intervention trial |
| ***Pharmacoepidemiology Report*** | | |
| **Christiane Gasse, Jutta Stieber, Angela Döring, Ulrich Keil,** and **Hans Werner Hense** | 695 | Population trends in antihypertensive drug use: Results from the MONICA Augsburg project 1984 to 1995 |

**Number 8**

| | | |
|---|---|---|
| ***Variance and Dissent*** | | |
| **Kathleen A. Cronin, Laurence S. Freedman, Ronald Lieberman, Heidi L. Weiss, Samuel W. Beenken,** and **Gary J. Kelloff** | 705 | Bayesian Monitoring of Phase II Trials in Cancer Chemoprevention |
| **Hans C. van Houwelingen** | 713 | On "Bayesian Monitoring . . ." |
| **Kathleen A. Cronin, Laurence S. Freedman,** and **Ronald Lieberman** | 715 | Reply to the Dissent by Hans C. van Houwelingen |
| ***Original Articles*** | | |
| **Carl van Walraven, Jeffrey L. Mahon, David Moher, Clara Bohm,** and **Andreas Laupacis** | 717 | Surveying Physicians To Determine the Minimal Important Difference: Implications for Sample-Size Calculation |
| **Fujian Song** | 725 | Exploring Heterogeneity in Meta-Analysis: Is the L'Abbé Plot Useful? |

| | | |
|---|---|---|
| **Paul Froom, Samuel Melamed, Estela Kristal-Boneh, Jochanan Benbassat,** and **Joseph Ribak** | 731 | Healthy Volunteer Effect in Industrial Workers |
| **H. Agüero-Torres, L. Fratiglioni, Z. Guo, M. Viitanen,** and **B. Winblad** | 737 | Mortality from Dementia in Advanced Age: A 5-Year Follow-Up Study of Incident Dementia Cases |
| **Christopher J. O'Donnell, Robert J. Glynn, Terry S. Field, Randy Averback, Suzanne Satterfield, Gottlieb C. Friesenger II, James O. Taylor,** and **Charles H. Hennekens** | 745 | Misclassification and Under-Reporting of Acute Myocardial Infarction by Elderly Persons: Implications for Community-Based Observational Studies and Clinical Trials |
| **Joyce C. Pressley** and **Clifford H. Patrick** | 753 | Frailty Bias in Comorbidity Risk Adjustments of Community-Dwelling Elderly Populations |
| **Annette J. Dobson, Patrick McElduff, Richard Heller, Hilary Alexander, Paula Colley,** and **Kate D'Este** | 761 | Changing Patterns of Coronary Heart Disease in the Hunter Region of New South Wales, Australia |
| **Martin C. Gulliford** and **Deepak Mahabir** | 773 | Relationship of Health-Related Quality of Life to Symptom Severity in Diabetes Mellitus: A Study in Trinidad and Tobago |
| **Robert J. Glynn, Mark Monane, Jerry H. Gurwitz, Igor Choodnovskiy,** and **Jerry Avorn** | 781 | Aging, Comorbidity, and Reduced Rates of Drug Treatment for Diabetes Mellitus |
| **Peter Schwandt, Hans C. Geiß, Michael M. Ritter, Christa Üblacker, Klaus G. Parhofer, Carsten Otto, Ester Laubach, Markus G. Donner, Gerda-M. Haas,** and **Werner O. Richter** | 791 | The Prevention Education Program (PEP). A Prospective Study of the Efficacy of Family-Oriented Life Style Modification in the Reduction of Cardiovascular Risk and Disease: Design and Baseline Data |
| **C. Stålsby Lundborg, R. Wahlström, T. Oke, G. Tomson,** and **V. K. Diwan** | 801 | Influencing Prescribing for Urinary Tract Infection and Asthma in Primary Care in Sweden: A Randomized Controlled Trial of an Interactive Educational Intervention |

**Number 9**

*Variance and Dissent*

| | | |
|---|---|---|
| **James E. Enstrom** | 813 | Smoking cessation and mortality trends among two United States populations |
| **Lewis H. Kuller** | 827 | Rebuttal to the paper by Enstrom |
| **James E. Enstrom** | 831 | Response to Kuller's dissent |
| **Lewis H. Kuller** | 835 | Rejoinder to Enstrom's response |

*Original Articles*

| | | |
|---|---|---|
| **Timothy R. Church** | 837 | A novel form of ascertainment bias in case-control studies of cancer screening |
| **Patti A. Groome, Tom. A Hutchinson, Pierre Tousignant,** and **James A. Hanley** | 849 | The repeatability of three methods for measuring prospective patients' values in the context of treatment choice for end-stage renal disease |
| **Kathleen W. Wyrwich, William M. Tierney,** and **Fredric D. Wolinsky** | 861 | Further evidence supporting an SEM-based criterion for identifying meaningful intra-individual changes in health-related quality of life |
| **C. B. Terwee, M. N. Gerding, F. W. Dekker, M. F. Prummel, J. P. van der Pol,** and **M. W. Wiersinga** | 875 | Test-retest reliability of the GO-QOL: A disease-specific quality of life questionnaire for patients with Graves' ophthalmopathy |

| | | |
|---|---|---|
| **Scott B. Cantor, Charlotte C. Sun, Guillermo Tortolero-Luna, Rebecca Richards-Kortum,** and **Michele Follen** | 885 | A comparison of C/B ratios from studies using receiver operating characteristic curve analysis |
| **Liora J. Valinsky, Richard L. Hockey, Michael S. T. Hobbs, David R. Fletcher, Terri J. Pikora, Richard W. Parsons,** and **Patrick Tan** | 893 | Finding bile duct injuries using record linkage: A validated study of complications following cholecystectomy |
| ***Letters to the Editor*** | | |
| **Pattie A. Groome,** and **William J. Mackillop** | 903 | Uses of ecologic studies in the assessment of intended treatment effects |
| **C. David Naylor** | 904 | Response |
| | | **Number 10** |
| ***Commentary*** | | |
| **Ólafur Ólafsson** | 905 | P. A. Schleisner: A Pioneer in Epidemiology |
| ***Variance and Dissent*** | | |
| **Richard M. Cormack** | 909 | Problems with Using Capture-Recapture in Epidemiology: An Example of a Measles Epidemic |
| **Charles A. McGilchrist** | 915 | Model Selection and Population Size Using Capture-Recapture Methods |
| **Ernest B. Hook** and **Ronald R. Regal** | 917 | Recommendations for Presentation and Evaluation of Capture-Recapture Estimates in Epidemiology |
| **Yue-Fang Chang, Ronald E. LaPorte, Deborah J. Aaron,** and **Thomas J. Songer** | 927 | The Importance of Source Selection and Pilot Study in the Capture-Recapture Application |
| **Richard M. Cormack** | 929 | Reply to Preceding Comments |
| ***Original Articles*** | | |
| **Ewout W. Steyerberg, Marinus J. C. Eijkemans,** and **J. Dik F. Habbema** | 935 | Stepwise Selection in Small Data Sets: A Simulation Study of Bias in Logistic Regression Analysis |
| **S. D. Walter, Les Irwig,** and **P. P. Glasziou** | 943 | Meta-Analysis of Diagnostic Tests With Imperfect Reference Standards |
| **Guy La Ruche, Isabelle Mensah-Ado, Christine Bergeron, Christiane Welffens-Ekra,** and **François Dabis for the DYSCER-CI Group** | 953 | Cervical Screening in Africa: Discordant Diagnosis in a Double Independent Reading |
| **Carlos Brotons, Gaietà Permanyer-Miralda, Francisco Calvo, Marta Campreciós, Mª Teresa Santos, Purificació Cascant, Irene Moral, Aida Ribera,** and **Jordi Soler-Soler** | 959 | Validation of the Agency for Health Care Policy and Research (AHCPR) Classification for Managing Unstable Angina |
| **Ian R. White** | 967 | The Level of Alcohol Consumption at Which All-Cause Mortality Is Least |
| **C. De Vigan, H. E. K. De Walle, S. Cordier, J. Goujard, R. Knill-Jones, S. Aymé, E. Calzolari, F. Bianchi,** and **the OECM Working Group** | 977 | Therapeutic Drug Use During Pregnancy: A Comparison in Four European Countries |

**Jersey Liang, Joan M. Bennett, Neal M. Krause, Ming-Cheng Chang, Huei-Sen Lin, Yi Li Chuang,** and **Shwu-Chong Wu** 983 Stress, Social Relations, and Old Age Mortality in Taiwan

**L. E. Griffith, D. J. Cook, G. H. Guyatt,** and **C. A. Charles** 997 Comparison of Open and Closed Questionnaire Formats in Obtaining Demographic Information From Canadian General Internists

**Guerrero-Romero Fernando, Rodriguez-Moran Martha,** and **Reyes Evangelina** 1007 Consumption of Soft Drinks With Phosphoric Acid As a Risk Factor for the Development of Hypocalcemia in Postmenopausal Women

***Second Thoughts***

**Joseph Herman** 1011 Reflections on the Science of Therapeutics

**Number 11**

***Original Articles***

**Marijke J. M. Chin A Paw, Jacqueline M. Dekker, Edith J. M. Feskens, Evert G. Schouten,** and **Daan Kromhout** 1015 How to Select a Frail Elderly Population? A Comparison of Three Working Definitions

**Jane McCusker, François Bellavance, Sylvie Cardin,** and **Éric Belzile** 1023 Validity of an Activities of Daily Living Questionnaire Among Older Patients in the Emergency Department

**Yael C. Cohen, Haya R. Rubin, Laurence Freedman,** and **Benjamin Mozes** 1031 Use of a Clustered Model to Identify Factors Affecting Hospital Length of Stay

**Thomas V. Perneger, Alain Leplège,** and **Jean-François Etter** 1037 Cross-Cultural Adaptation of a Psychometric Instrument: Two Methods Compared

**Mohan V. Bala, Lisa L. Wood, Gary A. Zarkin, Edward C. Norton, Amiram Gafni,** and **Bernie J. O'Brien** 1047 Are Health States "Timeless"? The Case of the Standard Gamble Method

**F. Curtin, A. Morabia,** and **M. S. Bernstein** 1055 Relation of Environmental Tobacco Smoke to Diet and Health Habits: Variations According to the Site of Exposure

**Xinhua S. Ren, Alfredo J. Selim, Graeme Fincke, Richard A. Deyo, Mark Linzer, Austin Lee,** and **Lewis Kazis** 1063 Assessment of Functional Status, Low Back Disability, and Use of Diagnostic Imaging in Patients with Low Back Pain and Radiating Leg Pain

**Kevin M. Johnson** 1073 The Two by Two Diagram: A Graphical Truth Table

**Eva Skovlund** 1083 Repeated Significance Tests on Accumulating Survival Data

**Kenji Hachisuka, Satoru Saeki, Yuka Tsutsui, Hiromi Chisaka, Hajime Ogata, Noboru Iwata,** and **Shunsuke Negayama** 1089 Gender-Related Differences in Scores of the Barthel Index and Frenchay Activities Index in Randomly Sampled Elderly Persons Living at Home in Japan

**Sandra A. Black, David V. Espino, Roderick Mahurin, Michael J. Lichtenstein, Helen P. Hazuda, Dennis Fabrizio, Laura A. Ray,** and **Kyriakos S. Markides** 1095 The Influence of Noncognitive Factors on the Mini-Mental State Examination in Older Mexican-Americans: Findings from the Hispanic EPESE

**Wolfgang Rathmann, Burkhard Haastert, Jeffrey M. Roseman,** and **Guido Giani** 1103 Cardiovascular Drug Prescriptions and Risk of Depression in Diabetic Patients

**Susan A. Oliveria, Paul J. Christos, Allan C. Halpern, Judith A. Fine, Raymond L. Barnhill,** and **Marianne Berwick** 1111 Patient Knowledge, Awareness, and Delay in Seeking Medical Attention for Malignant Melanoma

**Jamshid S. Kalantar** and **Nicholas J. Talley** 1117 The Effects of Lottery Incentive and Length of Questionnaire on Health Survey Response Rates: A Randomized Study

**Number 12**


*Commentary*

**Alvan R. Feinstein** 1123 Reflections on Reaching a Quadricentennial

*Original Articles*

**J.W. W. Coebergh, M. L. G. Janssen-Heijnen, P. N. Post,** and **P. P. A. Razenberg** 1131 Serious Co-morbidity Among Unselected Cancer Patients Newly Diagnosed in the Southeastern Part of The Netherlands in 1993–1996

**Sherine E. Gabriel, Cynthia S. Crowson,** and **W. Michael O'Fallon** 1137 A Comparison of Two Comorbidity Instruments in Arthritis

**Sue Ross, Adrian Grant, Carl Counsell, William Gillespie, Ian Russell,** and **Robin Prescott** 1143 Barriers to Participation in Randomised Controlled Trials: A Systematic Review

**Tien Chey, Bin Jalaludin, Ralph Hanson,** and **Stephen Leeder** 1157 Validation of a Predictive Model for Asthma Admission in Children: How Accurate Is it for Predicting Admissions?

**William E. Barlow, Laura Ichikawa, Dan Rosner,** and **Shizue Izumi** 1165 Analysis of Case-Cohort Designs

**ACCESS Research Group** 1173 Design of A Case Control Etiologic Study of Sarcoidosis (ACCESS)

**Claudine Legault, Marcia L. Stefanick, Valery T. Miller, Santica M. Marcovina,** and **Helmut G. Schrott** 1187 Effect of Hormone Replacement Therapy on the Validity of the Friedewald Equation in Postmenopausal Women: The Postmenopausal Estrogen/Progestins Interventions (PEPI) Trial

**Viktor E. Bovbjerg, David S. Siscovick, Bruce M. Psaty, Barbara S. McCann, Thomas D. Koepsell, T. E. Raghunathan,** and **Edward H. Wagner** 1197 Lipid-Lowering Medication and Risk of Injury

**Katsuhiko Yano, Kazunori Kodama, Yukiko Shimizu, Po-Huang Chyou, Dan S. Sharp, Russell P. Tracy, Beatriz L. Rodriguez, J. David Curb,** and **Shizuyo Kusumi** 1201 Plasma Fibrinogen and Its Correlates in Elderly Japanese Men Living in Japan and Hawaii

**Joel A. Simon** and **Esther S. Hudes** 1207 Serum Ascorbic Acid and Other Correlates of Self-Reported Cataract Among Older Americans

**Anu Molarius, Jacob C. Seidell, Susana Sans, Jaakko Tuomilehto,** and **Kari Kuulasmaa for the WHO MONICA Project** 1213 Varying Sensitivity of Waist Action Levels to Identify Subjects with Overweight or Obesity in 19 Populations of The WHO MONICA Project

**Ph. Ravaud, B. Giraudeau, G. R. Auleley, R. Edouard-Noël, M. Dougados,** and **Cl. Chastang** 1225 Assessing Smallest Detectable Change Over Time in Continuous Structural Outcome Measures: Application to Radiological Change in Knee Osteoarthritis

**Alula Hadgu** 1231 Discrepant Analysis: A Biased and an Unscientific Method for Estimating Test Sensitivity and Specificity

**Mark Loeb, Stephen D. Walter, Allison McGeer, Andrew E. Simor, Margaret A. McArthur,** and **Geoffrey Norman** 1239 A Comparison of Model-Building Strategies for Lower Respiratory Tract Infection in Long-Term Care

**Angel Asensio** and **Juana Torres** 1249 Quantifying Excess Length of Postoperative Stay Attributable to Infections: A Comparison of Methods

**Amy A. Hakim, J. David Curb, Cecil M. Burchfiel, Beatriz L. Rodriguez, Dan S. Sharp, Katsuhiko Yano,** and **Robert D. Abbott** 1257 Screening for Coronary Heart Disease in Elderly Men Based on Current and Past Cholesterol Levels

**Larry J. Dlugosz, William J. Hocter, Kevin S. Kaiser, James D. Knoke, Jack M. Heller, Nadia A. Hamid, Robert J. Reed, Kenneth S. Kendler,** and **Gregory C. Gray** 1267 Risk Factors for Mental Disorder Hospitalization after the Persian Gulf War: U.S. Armed Forces, June 1, 1991–September 30, 1993

***Pharmacoepidemiology Report***

**David A. Lane** and **Michael S. Kramer** 1279 Determining Exposure Underreporting in Pharmacoepidemiologic Case-Control Studies: Methods and Example

***Letters to the Editors***

**Keith O'Rourke** 1289 On the Alleged Protective Effect of Stratification Against "Type 1" Error

**Walter N. Kernan, Lawrence M. Brass,** and **Robert W. Makuch** 1289 Response

**P. A. H. van Noord, P. H. M. Peeters, D. E. Grobbee, J. S. Dubas,** and **E. te Velde** 1290 Onset of Natural Menopause

**I. Kato, P. Toniolo, A. Akhmedkhanov, K. L. Koenig, R. Shore,** and **A. Zeleniuch-Jacquotte** 1291 Response

***Index*** 1293 Author Index

Contents of Volume 51